

**LODI CITY COUNCIL  
SHIRTSLEEVE SESSION  
CARNEGIE FORUM, 305 WEST PINE STREET  
TUESDAY, MARCH 10, 2009**

A. Roll Call by City Clerk

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, March 10, 2009, commencing at 7:02 a.m.

Present: Council Member Hitchcock, Council Member Johnson, Mayor Pro Tempore Katzakian, and Mayor Hansen

Absent: Council Member Mounce

Also Present: City Manager King, City Attorney Schwabauer, and City Clerk Johl

B. Topic(s)

B-1 Presentation on Joint City of Stockton/City of Lodi Recycled Water Master Plan (PW)

City Manager King briefly introduced the subject matter of the joint feasibility study and implementation plan.

Public Works Director Wally Sandelin introduced Dave Richardson and Nichole Baker, consultant from RMC, to provide a PowerPoint presentation regarding the status of joint recycled water feasibility study and implementation plan. Mr. Sandelin provided a brief overview of the status of the project in light of litigation with the city of Stockton, the settlement agreement, and grant funding received for the study.

Dave Richardson, principal in charge and project manager, provided a PowerPoint presentation regarding the joint city of Stockton/City of Lodi recycled water master plan. Specific topics of discussion included project overview, study overview, project alternative overview, next steps, joint project history, joint project primary goals, location of major potential users, primary targeted recycled water uses, targeted users, demand estimate, committed recycled water flows, seasonal storage alternative for facilities location and cost estimate, blended supply alternative concept, blended facilities location and cost estimate, project alternative comparisons, and overall schedule.

In response to Mayor Hansen, Mr. Sandelin stated the reason the project took some time to get started between 2005 and 2007 was because it took time for the two cities to agree on language for the request for proposals and agreement, as well as the project being lower on the priority list than other projects pending at the time.

In response to Mayor Hansen, Mr. Sandelin stated the yellow lines on the map indicate the sphere of influence boundary lines.

In response to Council Member Johnson, Mr. Richardson stated the urban areas would include public areas such as parks, golf courses, cemeteries, and other areas with extensive lawns.

In response to Council Member Johnson, Ms. Baker stated the two smaller areas highlighted in yellow amidst the tan were taken out for grant funding purposes because those two areas are not yet approved.

In response to Mayor Hansen, Interim Community Development Director Rad Bartlam stated his recollection was that pursuant to the agreement there was a 300-foot buffer required from the

White Slough facility to the northern edge of the Stockton sphere of influence boundary. Mr. King stated the buffer only applies to residential and not commercial.

In response to Mayor Hansen, Mr. King stated it was his understanding that the buffer was applicable to only residential and not commercial.

In response to Mayor Hansen, Mr. Richardson stated as an example if the city of Stockton paid an additional \$100 fee for the cost of water it would increase the cost per acre foot per year by \$100. Mr. Richardson stated the cost estimate is based on a broad range because of the limited level of detail and information that is available right now.

In response to Mayor Hansen, Mr. Sandelin stated the additional water is not the City's water, as it is new water that could be coming from a combination of Woodbridge Irrigation District (WID), Delta, and groundwater sources; although, the WID would be most likely as the supplemental water.

In response to Council Member Johnson, Mr. Sandelin confirmed that the city of Stockton has an agreement with WID to purchase water up to 6,000 acre foot per year.

Discussion ensued between Mayor Hansen and Mr. Richardson regarding the cost of a new water facilities project, the probability of building a project as a result versus purchasing water, State contributing funding for the study because it is trying to promote supplemental water supply development, and the notion that the State would want to invest in capital costs because it is essentially the only new water since the rest of it has been around for some time.

In response to Council Member Hitchcock, Mr. Sandelin stated that, regardless of this project happening or not, growth will continue to happen in Stockton. Mr. Bartlam stated the City's basis for preserving White Slough is geared toward the longer range feeling that the Water Control Board will continue to restrict Delta discharge and to understand what the City will be doing when it can no longer do what it has been doing.

In response to Mayor Hansen, Mr. Richardson stated that the water going to Stockton is for irrigation purposes, and not drinking, because potable water requires a much higher level of treatment.

In response to Myrna Wetzel, Mr. Richardson stated the funding provided by the State falls under the current regulations and, while there are no additional rules to follow, the City must still comply with the California Environmental Quality Act and environmental review.

In response to Mayor Hansen, Mr. Richardson stated the blended supply cost estimate is much less for the alternative because it is a different smaller size pipeline providing service from two separate areas.

In response to Mayor Pro Tempore Katzakian, Mr. Richardson stated there are no additional storage costs, other than the two \$2 million storage ponds, as tanks are not being used because they are more costly.

In response to Mayor Hansen, Mr. Richardson stated evaporation is a factor with storage ponds because on average one-seventh of the supply is lost through evaporation. Mr. Richardson stated the extra water from seasonal storage will take care of the evaporation at the White Slough facility.

In response to Myrna Wetzel, Mr. Richardson stated once the water is treated at White Slough and becomes recycled water it is odor free.

In response to Mayor Hansen, Mr. Sandelin stated the City's premise will be to start at no cost to the City; although, the City does stand to benefit in the long run with respect to Delta discharge limitations. Mr. Sandelin stated most people in the recycled water business would like to benefit somehow.

In response to Mayor Hansen, Mr. Sandelin stated he believes that the city of Stockton realizes the Delta project does not solve its water supply issues for the next 20 to 40 years and recycled water will be a part of that solution.

In response to Mayor Hansen, Mr. Sandelin stated the cost for the possibility of piping back to the City of Lodi would be approximately \$2,000 per acre foot.

In response to Mayor Pro Tempore Katzakian, Mr. Sandelin stated for the near term the City's closest supply will come from WID and there will be an ultimate goal of putting water into the purple piping system.

In response to Council Member Johnson, Mr. Sandelin stated he does not know what the cost would be for taking the water to another alternative and the City would need to change the way it does business to take the water out to the market.

In response to Council Member Johnson, Mr. Sandelin stated there could be substantial water used by an agriculture source by way of a vineyard or the like and it could be used through a drip system.

In response to Mayor Hansen, Mr. Richardson stated he has experience in distributing water in Sonoma County and generally the agricultural users will only pay \$10 to \$20 per acre foot per year and therefore proximity is the only thing in favor of distributing the water to the farmers.

In response to Mayor Hansen, Mr. Richardson stated the costs for design phases are generally 10% of capital costs. He stated design and permitting costs were shown and included in the capital costs that could be paid by the State, customer, and/or developer.

In response to Council Member Hitchcock, Mr. Sandelin stated there is an assumption that if the City of Lodi provides the water the city of Stockton can pay the capital costs along with the State funding that may be available.

In response to Myrna Wetzel, Mr. Sandelin stated the drought will not have much affect on the project because the water is coming from the ground.

C. Comments by Public on Non-Agenda Items

None.

D. Adjournment

No action was taken by the City Council. The meeting was adjourned at 8:09 a.m.

ATTEST:

Randi Johl  
City Clerk



## CITY OF LODI COUNCIL COMMUNICATION

**AGENDA TITLE:** Presentation on Joint City of Stockton/City of Lodi Recycled Water Master Plan

**MEETING DATE:** March 10, 2009 (Shirtsleeve Session)

**PREPARED BY:** Public Works Director

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**RECOMMENDED ACTION:** Information only.

**BACKGROUND INFORMATION:** In April of 2005 the City of Stockton and City of Lodi agreed to jointly look at the feasibility of using Lodi's treated wastewater as a recycled water source for the City of Stockton. This resulted from the 2004 settlement agreement between the cities relative to the White Slough Water Quality Control Facility Sphere of Influence dispute. This project was jointly funded by the cities and a State recycled water planning grant. A presentation will be provided to the City Council regarding the overall project, alternatives considered, preliminary costs, and the next steps for the project.

**FISCAL IMPACT:** Not applicable.

**FUNDING AVAILABLE:** Not applicable.

  
F. Wally Sandelin  
Public Works Director

FWS/pmf

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APPROVED: 

Blair King, City Manager

# Stockton & Lodi Joint Recycled Water Feasibility Study and Implementation Plan

## *Status Update*

*City of Lodi  
March 10, 2009*



*Innovative Solutions for Water and the Environment*

# *Outline*

- Project Overview
  - Project History
  - Project Goals
- Study Overview
  - Recycled Water Market Assessment
  - Recycled Water Supply Assessment
- Project Alternative Overview
  - Seasonal Storage
  - Blended Supply
- Next Steps

# *Joint Project History*

- April 2005  
Joint settlement agreement
- April 2007 – December 2007  
First phase of work initiated
- June 2008  
SWRCB planning grant commitment received
- July 2008  
Second phase of work initiated

# *Joint Project Primary Goals*

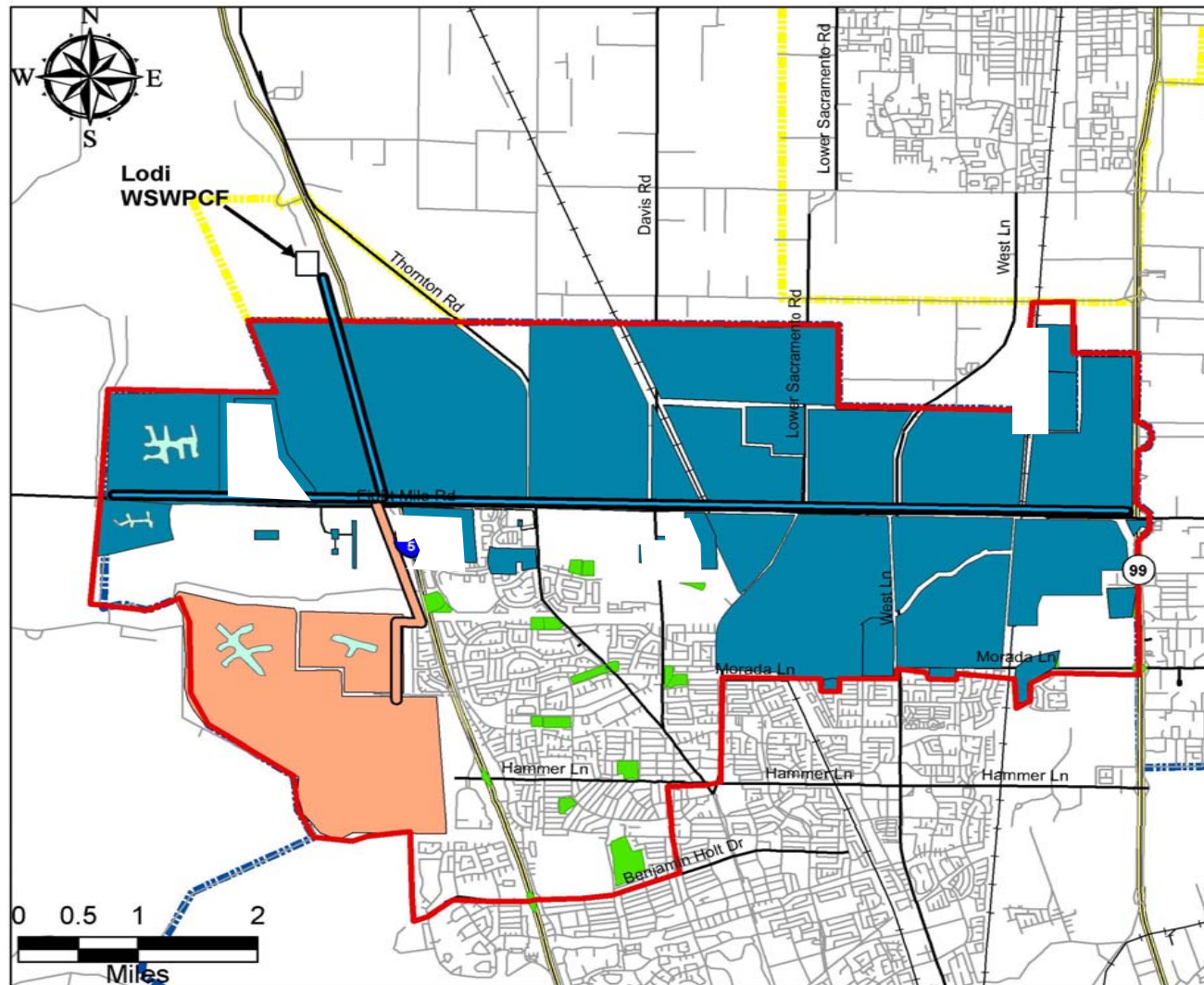
Goal	City of Stockton	City of Lodi
Increase Water Supply Reliability	✓	✓
Provide Alternative Effluent Management Mechanism		✓
Be Consistent with State and Federal Goals and Objectives Encouraging Recycled Water	✓	✓



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# *Location of Major Potential Users within Stockton Study Area*



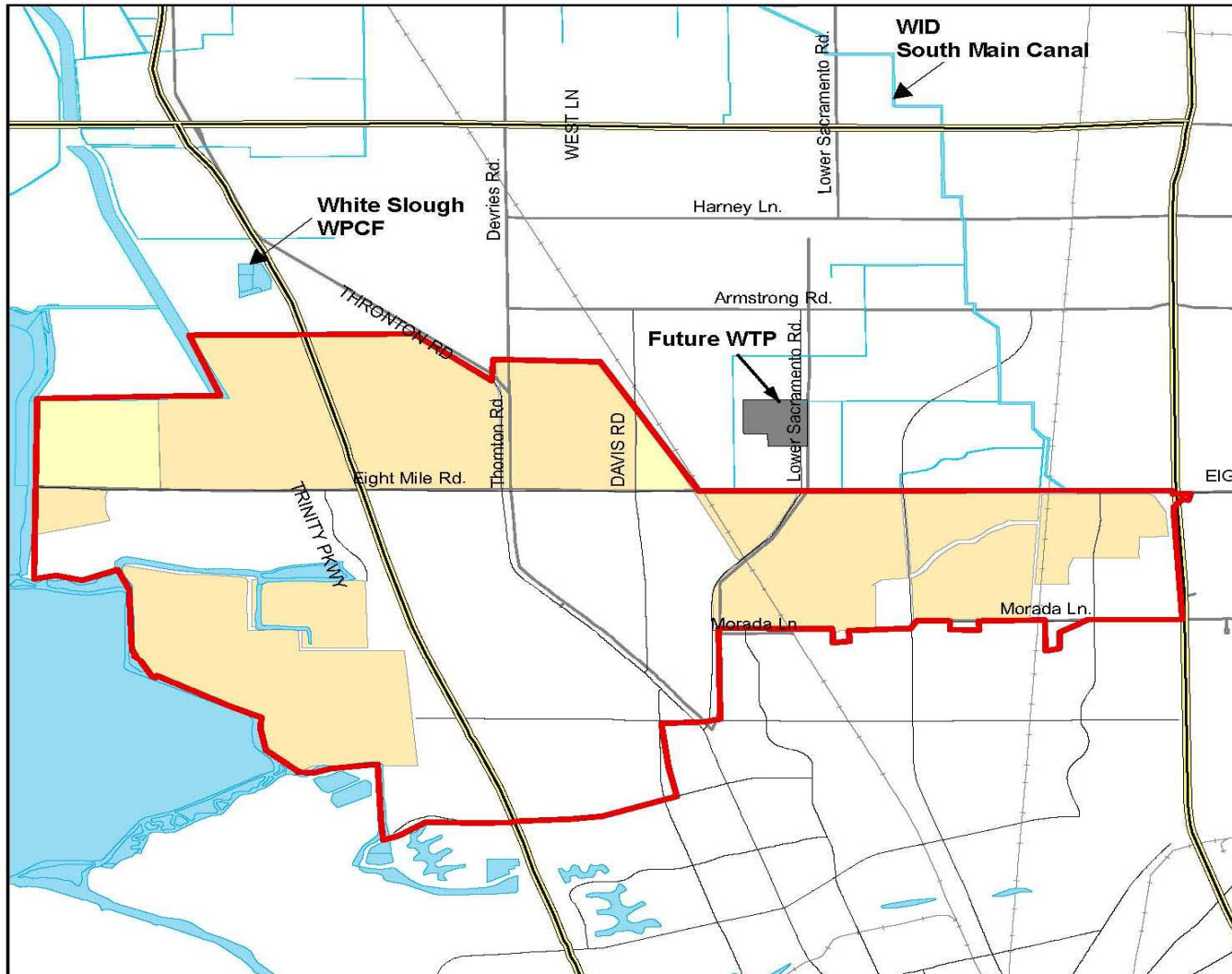
## Legend

- Service Area A
- Service Area B
- Service Area C

# *Primary Targeted Recycled Water Uses within Stockton Study Area*

- Urban
- Non Residential
- Landscape Irrigation
- Artificial Lake Filling

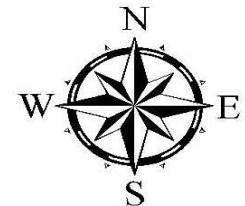
# Targeted Users



## Legend

- Study Area Boundary
- Phase 1
- Future Phases

0 0.5 1 2  
Miles



## *Targeted Users Demand Estimate*

	Approximate Irrigated Acreage	Peak Day Demand (ac-ft/yr)
Phase 1	950	3,200
Future Phases	160	520
<b>Total</b>	<b>1,110</b>	<b>3,720</b>

## *Committed Recycled Water Flows*

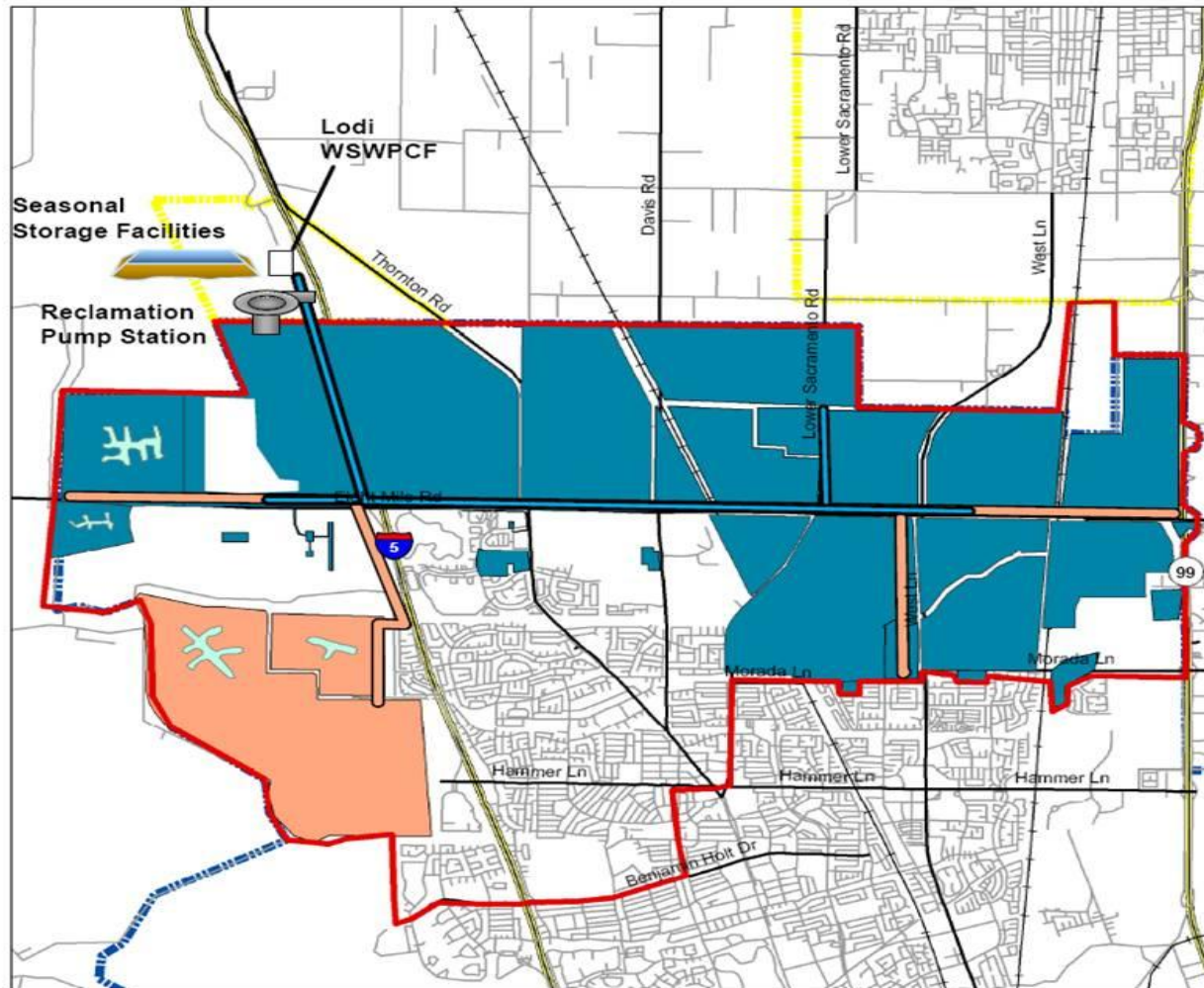
User	Annual Demand (acre-ft)
Existing NCPA Power Plant	Limited
Existing Mosquito/Fish Ponds	150
Lodi Energy Center Power Plant	1,100
Cannery Dilution	2,750
<b>Total Committed</b>	<b>4,450</b>

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# Seasonal Storage Alternative-Facilities Location



## Legend

### Targeted Users

- Service Area A
- Service Area B
- Transmission Main - Backbone
- Transmission Main - Laterals
- railroads
- Highways
- Major Roads
- Local Roads
- Study Area Boundary
- Lodi SOI
- Stockton Proposed SOI





# *Seasonal Storage Cost Estimate<sup>1</sup>*

	Capital Cost <sup>2</sup> (\$)	Total Annual Cost (\$/yr)
Recycled Water Supply	\$23.4M	\$2.5M
Main Conveyance Pipeline	\$44.4M	\$3.6M
TOTAL	\$67.8M	\$6.1M

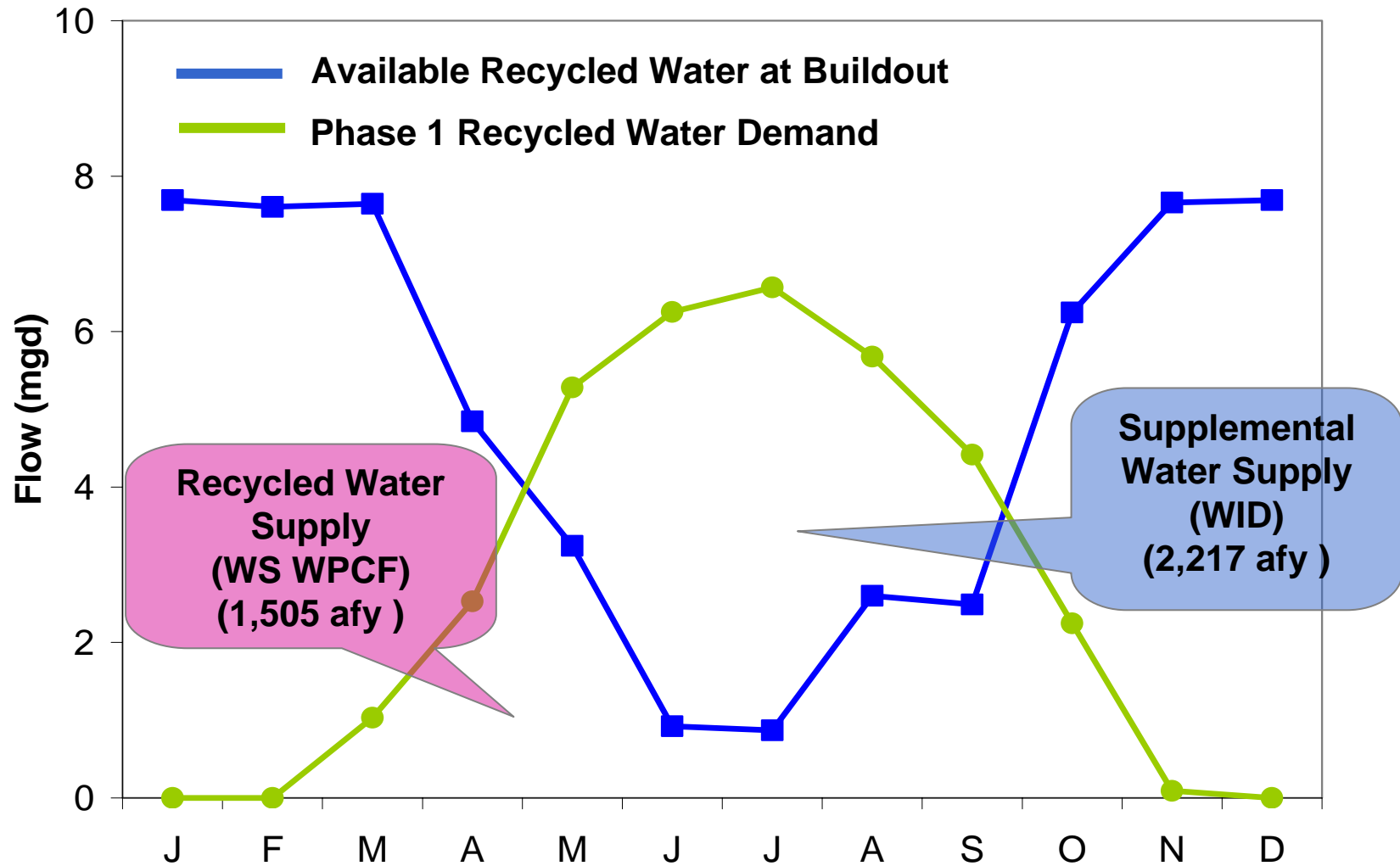
*Total Recycled Water Supply = 4,880 afy*

*\$1,250 / AF*

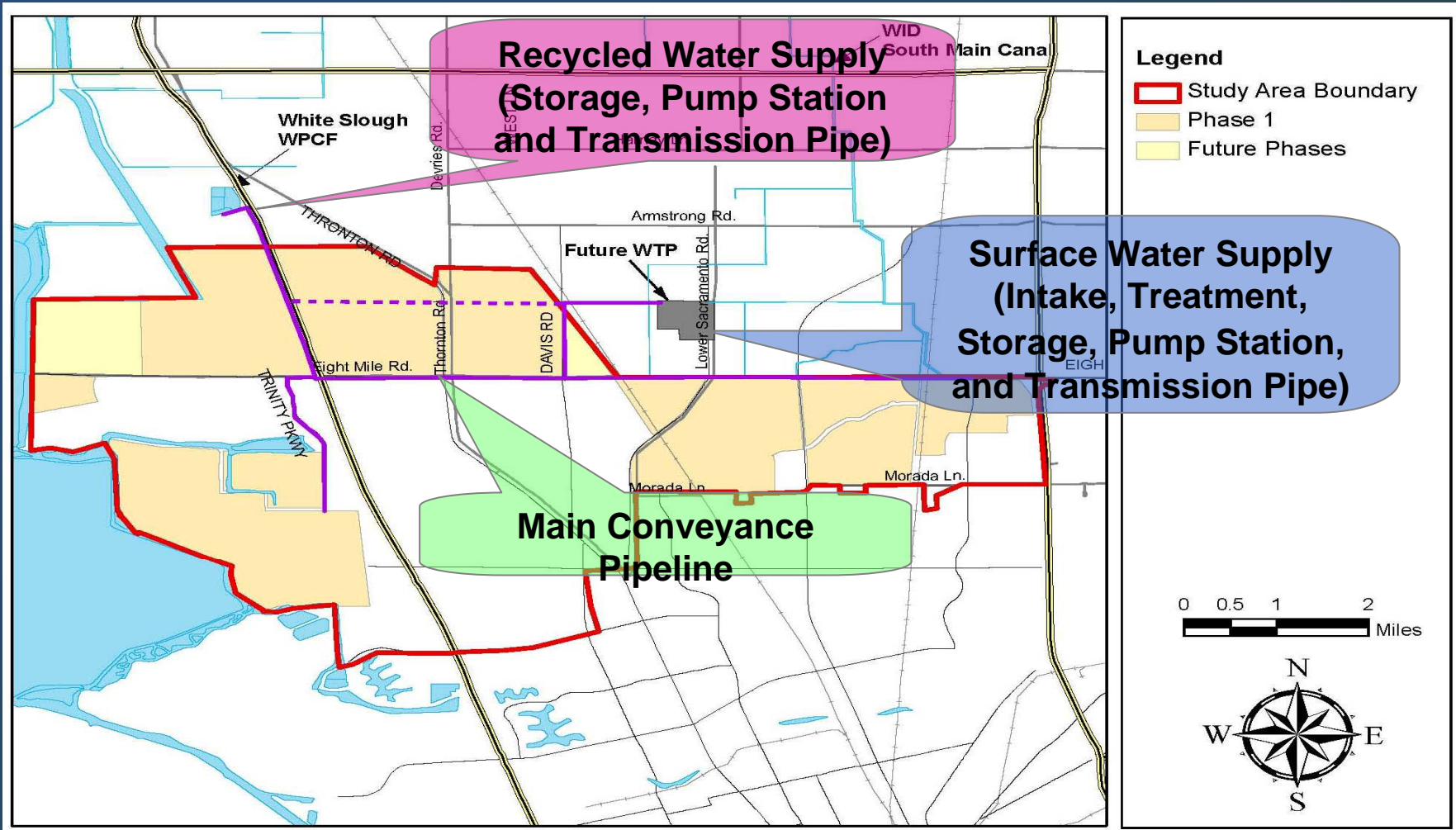
<sup>1</sup> Preliminary, conceptual-level cost estimates (+/- 30%); expressed in 2007 dollars; excludes the cost to purchase recycled water and supplemental water supply

<sup>2</sup>Not including property costs for area needed for seasonal storage

# Blended Supply Alternative Concept



# Blended Supply Alternative – Facilities Location



# *Blended Supply Cost Estimate<sup>1</sup>*

	Capital Cost (\$)	Total Annual Cost (\$/yr)
Recycled Water Supply	\$10.8M	\$935,000
Surface Water Supply	\$13.3M	\$1.3M
Main Conveyance Pipeline	\$17.2M	\$1.4M
TOTAL	\$41.5M	\$3.66M

<i>Total Water Supply = 3,725 afy</i>	<i>\$980 / AF</i>
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<sup>1</sup> Preliminary, conceptual-level cost estimates (+/- 30%); expressed in 2008 dollars; excludes the cost to purchase recycled water and supplemental water supply

# *Project Alternatives Comparison*

Evaluation Criteria	Seasonal Storage Alternative	Blended Supply Alternative
Capital Cost	\$67.8M	\$ 41.3 M
Unit Cost	\$ 1,250/AF	\$980/AF
Non Potable Water Yield (afy)	4,880	3,725
Water Rights	Water rights are not anticipated to be a constraint for either alternative	
Project Permitting	No significant constraints are anticipated	

# *Project Alternatives Comparison (Continued)*

Evaluation Criteria	Seasonal Storage Alternative	Blended Supply Alternative
Groundwater Quality Impacts	Groundwater quality impacts to be evaluated as part of the Implementation Plan	None
Institutional Constraints	Not anticipated to be a constraint based on Stakeholder Workshop held in September 2008	

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# *Overall Schedule*

- Feasibility Study and Implementation Plan work is in progress, scheduled to be complete in April 2009
- If the City decides to move forward with Phase 1 Project
  - Design could start by 2010
  - Recycled water could be available by 2013